FIGURE 1

GCTCCCAGCCAAGAACCTCGGGGCCGCTGCGCGGTGGGGAGGAGTTCCCCGAAACCCGGCCG CTAAGCGAGGCCTCCTCCCCGCAGATCCGAACGGCCTGGGCGGGGTCACCCCGGCTGGGA CAAGAAGCCGCCGCCTGCCTGCCCGGGCCCGGGGAGGGGGCTGGGGCTGGGGCCGGAGGCGG GGTGTGAGTGGGTGTGTGCGGGGGGCGGAGGCTTGATGCAATCCCGATAAGAAATGCTCGGG TGTCTTGGGCACCTACCCGTGGGGCCCGTAAGGCGCTACTATATAAGGCTGCCGGCCCGGAG GGCACTCACAGCCCCGCAGCGCATCCCGGTCGCCCCAGCCTCCCGCACCCCCATCGCCGG ${\tt AGCTGCGCCGAGAGCCCCAGGGAGGTGCC} \underline{{\tt ATG}} {\tt CGGAGCGGGTGTGTGGTGGTCCACGTATGG}$ ATCCTGGCCGGCCTCTGGCTGGCCGTGGCCGGGCCCCCTCGCCTTCTCGGACGCGGGGCC CCACGTGCACTACGGCTGGGGCGACCCCATCCGCCTGCGGCACCTGTACACCTCCGGCCCCC $\tt CGTGCACAGCGTGCGGTACCTCTGCATGGGCGCCGACGGCAAGATGCAGGGGCTGCTTCAGT$ ACTCGGAGGAAGACTGTGCTTTCGAGGAGGAGATCCGCCCAGATGGCTACAATGTGTACCGA TCCGAGAAGCACCGCCTCCCGGTCTCCCTGAGCAGTGCCAAACAGCGGCAGCTGTACAAGAA CAGAGGCTTTCTTCCACTCTCATTTCCTGCCCATGCTGCCCATGGTCCCAGAGGAGCCTG AGGACCTCAGGGGCCACTTGGAATCTGACATGTTCTCTTCGCCCCTGGAGACCGACAGCATG GAGACCATGCCCGGGCCTCTTCACTGCTGCCAGGGGCTGTGGTACCTGCAGCGTGGGGGACG TGCTTCTACAAGAACAGTCCTGAGTCCACGTTCTGTTTAGCTTTAGGAAGAAACATCTAGAA GTTGTACATATTCAGAGTTTTCCATTGGCAGTGCCAGTTTCTAGCCAATAGACTTGTCTGAT CATAACATTGTAAGCCTGTAGCTTGCCCAGCTGCTGCCTGGGCCCCCATTCTGCTCCCTCGA GGTTGCTGGACAAGCTGCTGCACTGTCTCAGTTCTGCTTGAATACCTCCATCGATGGGGAAC TCACTTCCTTTGGAAAAATTCTTATGTCAAGCTGAAATTCTCTAATTTTTTCTCATCACTTC CCCAGGAGCAGCCAGAAGACAGGCAGTAGTTTTAATTTCAGGAACAGGTGATCCACTCTGTA AAACAGCAGGTAAATTTCACTCAACCCCATGTGGGAATTGATCTATATCTCTACTTCCAGGG GCTTCAGGAGTAGGGGAAGCCTGGAGCCCCACTCCAGCCCTGGGACAACTTGAGAATTCCCC $\tt CTGAGGCCAGTTCTGTCATGGATGCTGTCCTGAGAATAACTTGCTGTCCCGGTGTCACCTGC$ TTCCATCTCCCAGCCCACCAGCCCTCTGCCCACCTCACATGCCTCCCCATGGATTGGGGGCCT CCCAGGCCCCCACCTTATGTCAACCTGCACTTCTTGTTCAAAAATCAGGAAAAGAAAAGAT TTTTGTATATTAAAATGGAGTTTGTTTGT

FIGURE 2

MRSGCVVVHVWILAGLWLAVAGRPLAFSDAGPHVHYGWGDPIRLRHLYTSGPHGLSSCFLRI RADGVVDCARGOSAHSLLEIKAVALRTVAIKGVHSVRYLCMGADGKMQGLLQYSEEDCAFEE EIRPDGYNVYRSEKHRLPVSLSSAKQRQLYKNRGFLPLSHFLPMLPMVPEEPEDLRGHLESD MFSSPLETDSMDFFGLVTGLEAVRSPSFEK

signal peptide:

amino acids 1-22

N-myristoylation sites:

amino acids 15-21, 54-60, 66-72, 201-207

Prokaryotic membrane lipoprotein lipid attachment site: amino acids 48-59

HBGF/FGF domain:

amino acids 80-131

FIGURE 3A

FIGURE 3B

Leptin (mg/ml)

Leptin (mg/ml)

PGFI9

wildype

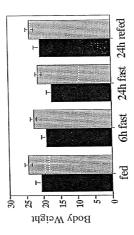
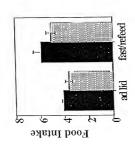


FIGURE 4B

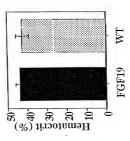
FIGURE 4A



Water Intake ml/day

WT

FGF19



1.5

FIGURE 4D



0.5

Urine output (ml/day)

FIGURE 5

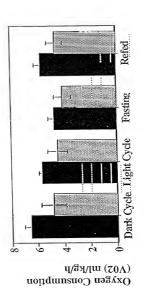
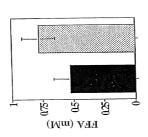


FIGURE 6A FIGURE 6B



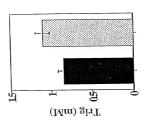
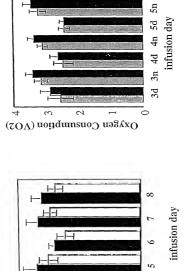
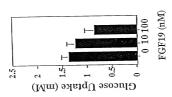


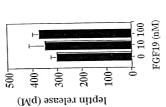
FIGURE 7A

A FIGURE 7B



food intake (g/d)





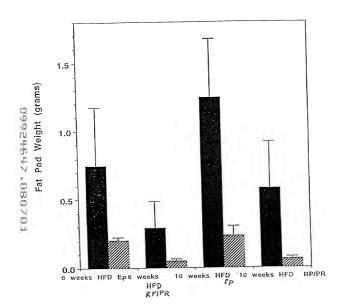


FIGURE 9

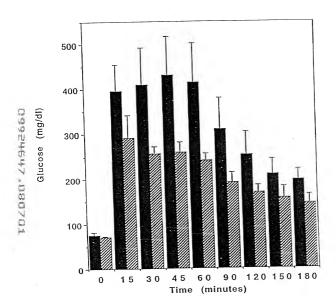
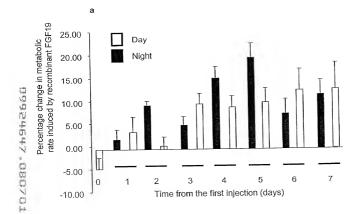
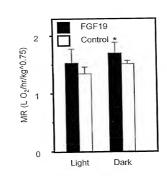
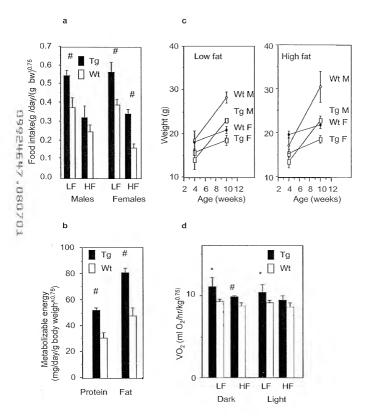


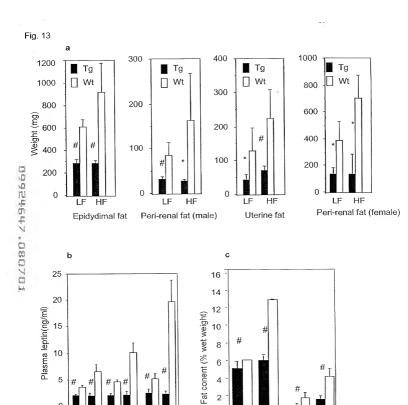
FIGURE 10



b







0

LF

HF

Liver

LF HF

Muscle

HF

24

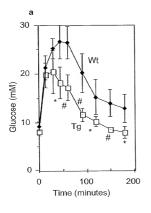
days on diet

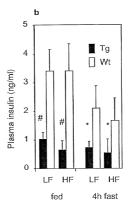
10

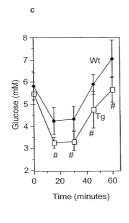
LF HF

40

Fig. 14.







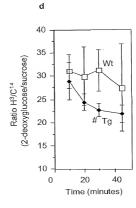


Fig. 15.

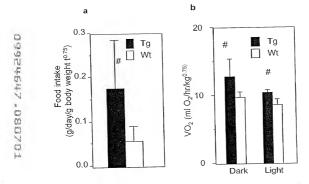
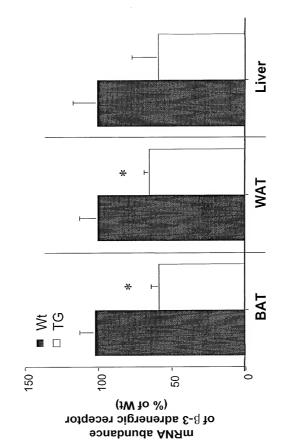
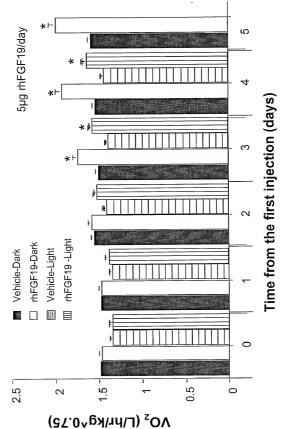


Figure 16



*P < 0.05 vs Wt controls

Figure 17



*P < 0.05 vs Vehicle controls with the same cycle on the same day

Figure 18

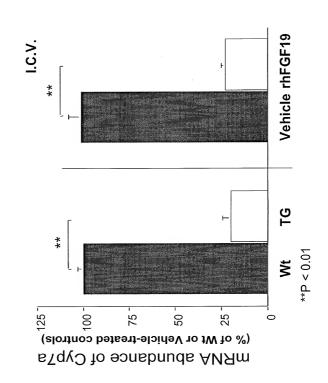


Figure 19

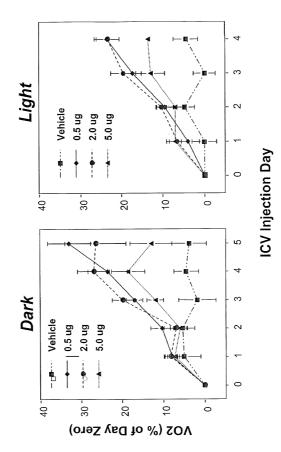


Figure 20

		•	rhFGF19	
	Vehicle	5.0 µg	2.0 µg	0.5 µg
NPY	1.0 +/- 0.08	0.81 +/- 0.23	0.63 +/-0.20	0.40 +/- 0.08
AgRP	1.0 +/- 0.33	0.26 +/- 0.10	0.57 +/- 0.26	0.29 +/- 0.16
POMC	1.0 +/- 0.27	1.49 +/- 0.42	3.48 +/- 1.5	38.77 +/- 3.32
MC4-R	1.0 +/- 0.16	0.47 +/- 0.09	0.70 +/- 0.10	0.48 +/- 0.08